REMARKS/ARGUMENTS

I. STATUS

Applicant has received the Office Action dated November 17, 2008, in which the Examiner: 1) rejected claims 1-3, 7, 9-10 and 12-17 under 35 U.S.C. § 103(a) as allegedly obvious under Sawada et al. (U.S. Pat. No. 6,907,470, hereinafter "Sawada") in view of Ball et al. (U.S. Pub. No. 20030046390, hereinafter "Ball") and Weil et al. (U.S. Pat. No. 2002/0093954, hereinafter "Weil"); and 2) rejected claims 4-6, 8 and 11 as allegedly obvious under Sawada in view of Ball and Weil and further in view of Kao et al. (U.S. Pat. No. 7,054,951. hereinafter "Kao").

With this Response, Applicant amends claims 1, 4, 7 and 9-10 and cancels claims 5-6, 8 and 12. Based on the amendments and arguments herein, Applicant respectfully submits that all pending claims are in condition for allowance.

II. NO COMBINATION OF SAWADA, BALL, WEIL AND/OR KAO TEACHES ALL CLAIM LIMITATIONS

As amended, independent claim 1 requires "wherein the configuration validation checker receives topology information from an entity external to the switch and prevents said topology information from being used by the switch for routing purposes if the topology information fails to comport with local topology information stored in the switch." A similar limitation was previously found in now-cancelled claim 6.

In rejecting claim 6, the Examiner admitted that Sawada, Ball and Kao fail to teach such a limitation. Instead, the Examiner asserted that Weil teaches this limitation at paragraph 0092. Respectfully, the Examiner is mistaken. Paragraph 0092 of Weil teaches that connectivity information is exchanged between neighboring nodes in a network. Weil also teaches that these nodes can eventually converge on a common view of the overall network topology. Based on this converged view, a routing table may be produced by each node to control routing of packets through that node. However, Weil does not appear to teach or even suggest that failure to comport this connectivity information between nodes

can result in preventing use of received connectivity information for routing purposes. As the Examiner admitted, and as Applicant agrees, Sawada, Ball and Kao fail to satisfy Weil's deficiencies. Thus, independent claim 1 is patentable over the combination of Sawada, Ball, Kao and Weil for at least this reason.

Claim 1 is patentable over the combination of Sawada, Ball, Weil and Kao for a second reason. Specifically, Weil teaches away from the limitations of claim 1. More specifically, claim 1 requires discarding all packets "if the identifier value does not match a value in the topology information." However, Weil explicitly disparages discarding even one packet, much less **all packets**: "…the packet may either be discarded or returned. Such a scenario is **unacceptable** for high quality of service traffic such as voice traffic." Paragraph 0010, ll. 13-15. MPEP § 2145(X)(D)(1) provides:

> [P]rior art must be considered in its entirety, including disclosures that teach away from the claims …
>
> A prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness… *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) …
>
> Furthermore, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed.." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

The fact that claim 1 requires discarding all packets in certain situations, while Weil explicitly describes the discarding of packets as simply "unacceptable" for high-quality service applications such as those described in the art of record, constitutes strong evidence that Weil teaches away from the claims and is a significant factor that points toward non-obviousness. Further, Applicant distinguishes the present situation from that in *In re Fulton*, because Weil actually does "criticize, discredit, or otherwise discourage the solution claimed." Thus, claim 1 is patentable over the combination of Sawada, Ball, Weil and Kao for this third reason. Applicant respectfully points out that, based on the foregoing, using

Weil to reject any pending or future claim that recites the discarding of a packet would be improper.

Claim 1 is patentable over the combination of Sawada, Ball, Weil and Kao for a third reason. Specifically, Weil teaches away from combination with Kao and Sawada. As explained above, Weil describes the discarding of packets as "unacceptable." Paragraph 0010, ll. 13-15. Kao, however, teaches the discarding of query packets, as the Examiner pointed out in the Office Action. Kao, col. 12, ll. 27-39. Sawada also teaches discarding packets. Sawada, col. 11, l. 35. MPEP § 2145(X)(D)(2) makes it abundantly clear that "[i]t is improper to combine references where the references teach away from their combination." Thus, claim 1 is patentable over the combination of Sawada, Ball, Weil and Kao for this third reason. Applicant respectfully points out that combining Weil with Sawada or Kao to reject any claim – whether in the present Office Action or in any future Office Actions – is improper. Further, combining Weil with any other reference that teaches the discarding of packets also is improper.

Claim 1 is patentable over the combination of Sawada, Ball, Weil and Kao for at least the foregoing reasons. For at least the same reasons, all claims dependent on claim 1 (i.e., claims 2-4) also are patentable over the combination of Sawada, Ball, Weil and Kao.

Dependent claim 4 is patentable for an additional reason. Specifically, claim 4 requires:

> receiving an identifier value from another entity coupled to the switch via the functional link;
> comparing the identifier value received from the another entity with said local topology information contained in the switch;

In rejecting claim 4, the Examiner admitted that Sawada, Ball and Weil failed to teach these limitations. Thus, the Examiner turned to Kao. Specifically, the Examiner cited Kao, col. 13, ll. 51-67 and col. 14, ll. 1-5 as teaching these limitations. Office Action, pp. 9-10. Respectfully, the Examiner is mistaken. As the Examiner points out, Kao appears to teach determining whether a topology

packet is generated "by [a] receiving node." If so, the topology information in the node is updated. If not, Kao teaches determining whether the ring identifier associated with the topology discovery packet matches the ring identifier associated with the ring on which the packet was received. Kao's teaching of determining whether a topology packet was generated by the node that receives it is in contrast to claim 4, which requires determining whether identifiers associated with **separate entities** are the same or different. None of the art of record satisfies Kao's deficiency in this regard. For at least this additional reason, claim 4 is patentable over the combination of Sawada, Ball, Weil and Kao.

Dependent claim 4 is patentable for an additional reason. In particular, claim 4 further requires:

> if the identifier value matches a value in the local topology information, permitting the switch to route packets over the functional link; and
> if the identifier value does not match a value in the local topology information, discarding all packets targeting the functional link.

The Examiner cites col. 12, ll. 27-39 as teaching the discarding of packets. Respectfully, the Examiner is mistaken. This portion of Kao merely teaches that **a** query packet **might** be discarded if a MAC address associated with that packet is larger than that of the node that receives the query packet. Kao most certainly does not teach discarding **all packets** targeting the functional link, as required by claim 4. Thus, claim 4 is patentable over the combination of Sawada, Ball, Weil and Kao for at least this additional reason.

As amended, independent claim 7 requires "means for receiving an indication from the link up/down detection logic units that a link to an associated port has become non-functional and means for ceasing routing of all packets." As explained above in reference to independent claim 1, the combination of Sawada, Ball, Weil and Kao fails to teach such a limitation. Moreover, as previously explained, Weil teaches against "ceasing routing of all packets," as claimed. Further, Weil teaches against combination with Kao. For at least these three

reasons, independent claim 7 and dependent claim 9 are patentable over the combination of Sawada, Ball, Weil and Kao.

As amended, independent claim 10 requires "wherein the link up/down detection logic informs the configuration validation checker when said link becomes non-functional, and the configuration validation checker responds by rejecting all packets destined to said link." The Examiner cites Sawada, col. 11, ll. 33-48 as teaching this limitation. Respectfully, the Examiner is mistaken. This portion of Sawada merely mentions the discarding of a packet; it does not mention notification when a link becomes non-functional, nor does it mention rejecting packets in response to said notification, nor does it mention rejecting **all** packets in response to said notification, all as claimed. Independent claim 10 and dependent claim 11 are patentable over the combination of Sawada, Ball and Weil for at least this reason. Further, claims 10-11 also are patentable over the combination of Sawada, Ball and Weil because Sawada teaches the discarding of packets, while Weil explicitly teaches against discarding packets, as previously explained.

Independent claim 13 requires "if the switch determines that the packet is to be routed out through said port associated with a detected link down event, the switch discarding the packet." As previously explained with reference to independent claim 1, the combination of Sawada, Ball, Weil and Kao fails to teach or suggest such a limitation. Further, as explained, Weil teaches away from discarding packets, as claimed. Further still, as explained, Weil teaches away from combination with any reference that teaches discarding packets (e.g., Sawada and Kao). For at least these reasons, independent claim 13 and dependent claims 14-17 are patentable over the combination of Sawada, Ball, Weil and Kao.

III. CONCLUSION

In the course of the foregoing discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as

a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicant respectfully requests reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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